

**IN THE UNITED STATE PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of: Scott Allan Kendall
For: REMOTE CONTROL SYSTEM AND METHOD FOR
PERSONAL VIDEO RECORDER
Serial No. 10/510,055
Filed October 4, 2004
Art Unit 2621
Examiner Nigar Chowdhury
Attorney Docket No. PU020098
Confirmation No. 6272

APPEAL BRIEF

ON APPEAL FROM GROUP ART UNIT 2621

**Mail Stop Appeal Brief Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Sir:

This Appeal Brief is submitted both in support of the Notice of Appeal, which was filed May 13, 2009, and in response to the Non-Final Office Action dated February 20, 2009.

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I. REAL PARTY IN INTEREST

The real party in interest is Thomson Licensing S.A., the assignee of record, whose assignment is recorded in the USPTO as of October 4, 2004 on two (2) pages beginning at Reel 016417, Frame 0680.

II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

- a) Claims 1-21 are pending in this application, stand rejected in an Office Action dated February 20, 2009, and are the subject of this appeal.
- b) Claims 1 and 21 are the only independent claims.
- c) Claims 22-27 have been cancelled in a response to a prior Office Action.

IV. STATUS OF AMENDMENTS

The claims listed in Section VIII, Claims Appendix, of this Appeal Brief correspond to the claims as submitted in Appellant's response filed January 30, 2009, where claim amendments were submitted and entered. All amendments filed in this application have been entered and there are none pending.

V. SUMMARY OF CLAIMED SUBJECT MATTER

It should be explicitly noted that it is not the Appellant's intention that the currently claimed or described embodiments be limited solely to operation within the illustrative embodiments identified below. Furthermore, descriptions of illustrative embodiments are provided below in association with portions of the claims, which are related to the identified illustrative embodiments, entirely for compliance with, and satisfaction of, the requirements for filing this appeal. There is no intention to read any further interpreted limitations into the claims as presented.

The claimed invention, as recited in claim 1, is directed to a video playback apparatus (*page 1, paragraph [0007] and Figures 1 and 2*) having means to invoke one of a replay function and a reverse function separately upon receipt of a first signal (*page 1, paragraph [0007] and page 2, paragraphs [0008] and [0012]*), wherein said replay function is activated in response to said first signal exhibiting a first duration of time and wherein said reverse function is activated in response to said first signal exhibiting a second duration of time different from said first duration (*page 1, paragraph [0007]*), and means to invoke one of a skip function and a forward function separately upon receipt of a second signal different from the first signal (*page 1, paragraph [0007] and page 2, paragraphs [0008] and [0012]*), wherein said skip function is activated in response to said second signal exhibiting a third duration of time and wherein said forward function is activated in response to said second signal exhibiting a fourth duration of time different from said third duration (*page 1, paragraph [0007]*).

The claimed invention, as recited in claim 21, is directed to a method of controlling operation of a digital video playback apparatus (*page 1, paragraph [0007] and Figures 1 and 2*), the method comprising the steps of: invoking a skip function upon receipt of a second signal exhibiting less than a first predetermined duration, invoking a forward function exhibiting a first forward speed upon receipt of the second signal exhibiting greater than the first predetermined duration, invoking the forward function exhibiting a second, faster forward speed upon receipt of either the second signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the second signal (*page 4, paragraph [0024] though page 6, end of paragraph [0027]*); and invoking a replay function upon receipt of a first signal exhibiting less than a first predetermined duration, invoking a reverse function exhibiting a first reverse speed upon receipt of the first signal exhibiting greater than the first predetermined duration, invoking the reverse function exhibiting a second, faster reverse speed upon receipt of either the first signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the first signal (*page 6, paragraphs [0028] though paragraph [0029]*).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Certain art-based rejections for this application are based on the following references: U.S. Patent 6,847,778 to Vallone et al. (hereinafter “*Vallone*”); and U.S. Patent 6,360,053 to Wood et al. (hereinafter “*Wood*”).

The ground of rejection for this application for which review is sought in this appeal is presented below as follows:

1. Whether claims 1-21 are properly rejected by the USPTO under 35 U.S.C. §103(a) as being unpatentable over Vallone in view of Wood.

VII. ARGUMENT

Appellant respectfully traverses the rejection in accordance with the detailed arguments set forth below.

1. CLAIMS 1-21 ARE IMPROPERLY REJECTED BY THE USPTO UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER VALLONE IN VIEW OF WOOD.

Claim 1

In this Office Action, it is stated that,

“Vallone discloses a video playback apparatus (Col. 7 line 10-16) having means to invoke replay function and reverse functions upon receipt of a first signal, and means to invoke one of a skip function and a forward function upon receipt of a second signal different from the first signal (Fig. 9, Col. 10 line 4-19).”

The most important aspect of the section reproduced immediately above from the present Office Action is that it applies the Vallone reference to language **not present** in claim 1. For example, Vallone is applied against a limitation shown as “means to invoke one of a skip function and a forward function upon receipt of a second signal different from the first signal.” But the actual claim language is for a “means to invoke a skip function and a forward function separately upon receipt of a second signal different from the first signal.” The limitations are different in a significant and material way. Since Vallone is not applied against the actual language in claim 1 and because Vallone is applied against claim language that is materially different from the language in claim 1, it is submitted that the present Office Action fails to state a *prima facie* case of obviousness

against claim 1 and the claims dependent therefrom. For at least this reason, it is respectfully requested that the Board reverse this rejection of claim 1.

Claim 1 is an independent claim that serves directly as a base claim for claims 2-20. Claim 1 calls for:

A video playback apparatus having means to invoke a replay function and a reverse function separately upon receipt of a first signal, wherein said replay function is activated in response to said first signal exhibiting a first duration of time and wherein said reverse function is activated in response to said first signal exhibiting a second duration of time different from said first duration, and means to invoke a skip function and a forward function separately upon receipt of a second signal different from the first signal, wherein said skip function is activated in response to said second signal exhibiting a third duration of time and wherein said forward function is activated in response to said second signal exhibiting a fourth duration of time different from said third duration.

According to claim 1, there exists a means for invoking two functions separately based on the duration of a received first signal and there exists a different means for invoking two other and different functions based on the duration of a received second signal. One means invokes and activates the replay function and the reverse function separately, based on the duration of a received first signal. The other means invokes and activates the skip function and the forward function separately, based on the duration of a received second signal.

As shown in the claim and discussed above, one means can invoke the replay function when the first signal has a first time duration and then separately that same means can invoke the reverse function when the first signal has a second time duration different from the first time duration. In addition, the other means can invoke the skip function when the second signal has a third time duration and then separately the same means, called the other means here, can invoke the forward function when the second signal has a fourth time duration different from the third time duration.

The claim makes it clear that different functions are separately invocable from the same means and that it is the duration of the respective received signal that determines which function of the two is invoked by a particular means. There is no alternative language present and there is no language which expressly or implicitly suggests an "either/or" type of configuration. Both functions for a particular means must be separately invocable and activated in response the duration of a specific received signal.

The specification is replete with support that there is a means for which at least two different functions can be separately activated in response to a received signal: one function is activated when the received signal has a first duration and the other function is activated when the received signal

has a duration different from the first duration. Both functions are separately invocable by the received signal, wherein activation of the function is determined by the duration of the received signal.

Vallone does not teach, show, or suggest the elements relied on in the present Office Action. In this Office Action, it is stated that,

"Vallone discloses a video playback apparatus (Col. 7 line 10-16) having means to invoke replay function and reverse functions upon receipt of a first signal, and means to invoke one of a skip function and a forward function upon receipt of a second signal different from the first signal (Fig. 9, col. 7 lines 14-16, col. 10 line 4-19)."

At the outset, it is submitted that the reliance on the cited sections of Vallone is misplaced because Vallone does not teach two different functions being invocable and activatable separately from a single means based on the duration of the signal produced by that means. The cited section from col. 7 of Vallone discusses the functionality of parser 705 which include playback and special effects such as fast forward, reverse, play, pause, fast/slow play, indexing, and fast/slow reverse play. See *Vallone at col. 7, lines 14-16*. The cited section from col. 10 of Vallone discusses a remote control that "may also have a fast forward key." There is no suggestion that this fast forward key has anything to do with, or can produce separately, two different functions whose invocation and activation are based on the duration of the signal produced by that that fast forward key. The key mentioned by Vallone provides the singular function of fast forwarding. Vallone merely discusses how the depression of the "fast forward key" causes a forward movement by transform 902 across two buffers. Vallone goes on to state at the end of the cited section that the "same method works for fast reverse in that the transform 902 moves the current pointer 920 backwards." There are no teachings in Vallone that two functions, namely, fast forward and fast reverse, are separately invoked and activated by the same signal having different durations or for that matter by the same fast forward key.

In cols. 19 and 20, Vallone describes the individual functions that can be initiated by buttons on the remote control 1401 in Figure 14. No button on the remote control 1401 of Vallone is used for producing more than one assigned function. Each function on Vallone's remote control is initiated by its own respective button. Vallone appears to emit a different signal from his remote for each different button on the remote. As such, Vallone must use a different button and thereby a different signal to initiate each different function from the remote. Vallone lacks any teaching,

showing, or suggestion that the same received signal could be used to invoke and initiate separately a function such as replay and a function such as reverse based on the duration of that received signal.

There is no teaching in Vallone that would lead one to believe otherwise.

In addition to this deficiency in Vallone, it is admitted on page 4 of the present Office Action that,

"Vallone fails to disclose a replay function and a reverse function separately upon receipt of a first signal, wherein the replay function is activated in response to first signal exhibiting a first duration of time and wherein reverse function is activated in response to first signal exhibiting a second duration of time different from first duration and wherein skip function is activated in response to second signal exhibiting a third duration of time and wherein forward function is activated in response to second signal exhibiting a fourth duration of time different from third duration."

In order to cure this additional deficiency in Vallone, Wood was combined with Vallone. But this combination still fails to teach, show, or suggest all the elements in the claim.

Wood appears to disclose a method and apparatus for making temporal movements through recorded media. In cols. 3 and 4 of Wood's specification, Wood suggests that the rate of fast forwarding can be increased by depressing and holding the fast forward button for a longer period of time. The longer the time that the button is depressed translates into a greater increase for the fast forwarding speed or rate. Wood discusses the similar operation for the rewind button and for the playback or play button.

In an alternative embodiment, Wood suggests that, by depressing and holding yet another button on the remote, it is possible to jump more or less of a temporal distance (e.g., a jump of 5 sec. or 30 sec.) on the recorded medium. From the disclosure in col. 4, Wood seems to indicate that one button is dedicated to forward temporal distance movements (i.e., fast forwarding) while another different button would be dedicated to reverse temporal distance movements (i.e., fast reversing).

But changing speed of a forward or a reverse operation by holding down a button on the remote control in Wood is not equivalent or even suggestive of invoking two different functions separately with the same signal based on the duration of that signal. Wood is merely modifying a characteristic, namely, the speed, of the same function. Wood is not invoking or activating different functions. That is, when Wood wishes to perform a speed change, the function, whether forward or reverse, stays the same while its speed is increased or decreased.

Each button on Wood's remote control is still a single function button: a fast forward button in one case and a fast reverse button in the other case. Nowhere does Wood suggest that multiple

functions could be invoked using the same signal (presumably from the same button being depressed) wherein the invoked function is related to the duration of the received signal. Thus, Wood does not cure the admitted deficiency in Vallone and the combination of Wood and Vallone does not teach, show, or suggest all the limitations in claim 1.

For the reasons set forth above, it is believed that claim 1 would not have been obvious to a person of ordinary skill in the art upon a reading of Vallone and Wood, either separately or in combination. Therefore, it is submitted that claim 1 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 1.

Dependent Claims 2-20

Claims 2-20 depend ultimately from claim 1. Each dependent claim includes all the features of claim 1 including all the particular features discussed immediately above. In view of this dependence and for the sake of brevity in this brief, Appellant essentially repeats the above argument from claim 1 for each of dependent claims 2-20. Thus, it is submitted that claims 2-20 are allowable at least by virtue of their dependency from claim 1 and because each claim recites further distinguishing features thereover. It is respectfully requested the Board reverse the rejection of dependent claims 2-20.

Claim 21

Claim 21 is an independent claim. Claim 21 calls for:

A method of controlling operation of a digital video playback apparatus, the method comprising the steps of:

invoking a skip function upon receipt of a second signal exhibiting less than a first predetermined duration, invoking a forward function exhibiting a first forward speed upon receipt of the second signal exhibiting greater than the first predetermined duration, invoking the forward function exhibiting a second, faster forward speed upon receipt of either the second signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the second signal; and

invoking a replay function upon receipt of a first signal exhibiting less than a first predetermined duration, invoking a reverse function exhibiting a first reverse speed upon receipt of the first signal exhibiting greater than the first predetermined duration, invoking the reverse function exhibiting a second, faster reverse speed upon receipt of either the first signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the first signal.

Claim 21 is a method claim including limitations substantially similar in nature to those discussed above with respect to claim 1. Claim 21 calls for invoking a skip function and a plurality of fast forward functions at different speeds by a received first signal. As the duration of the received first signal increases past certain defined thresholds, the invoked and activated function changes from skip to fast forward and then from lower to higher fast forward speeds. None the less, two different functions are invoked separately by the very same first signal based on the duration of that signal.

Claim 21 also calls for invoking a replay function and a plurality of reverse functions at different speeds by a received second signal. As the duration of the received second signal increases past certain defined thresholds, the function changes from replay to reverse and then from lower to higher reverse speeds. As with the case of the skip and forward functions, two different functions are invoked separately by the very same second signal based on the duration of that signal.

Neither Wood nor Vallone teach or suggest that both multiple different functions and rate changes for one of those multiple different functions can be invoked by using the same received signal, wherein the duration of the received signal is used to determine the particular function and/or rate being invoked.

In view of this correspondence between claims 1 and 21 as shown above and for the sake of brevity in this brief, Appellant essentially repeats the argument from claim 1 above for claim 21 without any loss of generality or limitation. For all the reasons set forth herein with respect to claim 21 and above with respect to claim 1, it is believed that the elements of claim 21 are not taught, shown, or suggested by Vallone and Wood, either separately or in combination. It is therefore submitted that claim 21 would not have been obvious to a person of ordinary skill in the art upon a reading of Vallone and Wood, either separately or in combination. Thus, it is submitted that claim 21 is also allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 2.

Conclusion

In light of these remarks, it is submitted that claims 1-21 would not have been obvious to a person of ordinary skill in the art upon a reading of Vallone in view of Wood. Therefore, it is

believed that claims 1-21 are allowable under 35 U.S.C. §103. It is respectfully requested that the Board of Patent Appeals and Interferences reverse the rejection of claims 1-21.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. **(Previously Presented)** A video playback apparatus having means to invoke a replay function and a reverse function separately upon receipt of a first signal, wherein said replay function is activated in response to said first signal exhibiting a first duration of time and wherein said reverse function is activated in response to said first signal exhibiting a second duration of time different from said first duration, and means to invoke a skip function and a forward function separately upon receipt of a second signal different from the first signal, wherein said skip function is activated in response to said second signal exhibiting a third duration of time and wherein said forward function is activated in response to said second signal exhibiting a fourth duration of time different from said third duration.

2. **(Previously Presented)** The video playback apparatus of claim 1 wherein the replay function is invoked upon receipt of the first signal exhibiting said duration of time below a first replay-reverse predetermined threshold, and the reverse function with a first reverse speed is invoked upon receipt of the first signal exhibiting said duration of time above the first replay-reverse predetermined threshold, and wherein the skip function is invoked upon receipt of the second signal exhibiting said duration of time below a first skip-forward predetermined threshold and a first forward function with a first forward speed is invoked upon receipt of the second signal exhibiting said duration of time above the first skip-forward predetermined threshold.

3. **(Original)** The video playback apparatus of claim 2 wherein the first skip-forward predetermined threshold is one second and the first replay-reverse predetermined threshold is one second.

4. **(Previously Presented)** The video playback apparatus of claim 3 wherein the reverse function has the first reverse speed and a second reverse speed faster than the first reverse speed, and upon receipt of the first signal exhibiting said duration of time greater than the first replay-reverse predetermined threshold, the first reverse speed is invoked, and upon receipt of the first signal exhibiting said duration greater than a second replay-reverse predetermined threshold, the second reverse speed is invoked.

5. **(Previously Presented)** The video playback apparatus of claim 3 wherein the forward function has the first forward speed and a second forward speed faster than the first forward speed, and upon receipt of the first occurrence of the second signal exhibiting said duration of time greater than the first skip-forward predetermined threshold, the first forward speed is invoked, and upon receipt of the second signal exhibiting said duration greater than a second skip-forward predetermined threshold greater than the first skip-forward predetermined threshold, the second forward speed is invoked.

6. **(Previously Presented)** The video playback apparatus of claim 5 wherein upon receipt of the second signal exhibiting said duration greater than a next greater skip-forward predetermined threshold, the next faster forward speed is invoked, up to the highest available forward speed.

7. **(Previously Presented)** The video playback apparatus of claim 5 wherein the second forward predetermined threshold is at least one second greater than the first forward predetermined threshold.

8. **(Previously Presented)** The video playback apparatus of claim 4 wherein upon receipt of the first signal exhibiting said duration greater than a next greater replay-reverse predetermined threshold, the next faster reverse speed is invoked, up to the highest available reverse speed.

9. **(Previously Presented)** The video playback apparatus of claim 4 wherein the second replay-reverse predetermined threshold is at least one second greater than the first replay-reverse predetermined threshold.

10. **(Previously Presented)** The video playback apparatus of claim 1 having 2X, 4X, 8X, and 16X forward speeds and -2X, -4X, -8X, and -16X reverse speeds.

11. **(Previously Presented)** The video playback apparatus of claim 1 wherein duration of a remote control signal selected from the first signal and the second signal is calculated based on number of repetitions of code signal included in the remote control signal received, each repetition separated by a predetermined gap.

12. **(Original)** The video playback apparatus of claim 11 wherein the predetermined gap is between 1 and 10 milliseconds.

13. **(Previously Presented)** The video playback apparatus of claim 11 wherein an end of a remote control signal is calculated upon a gap between repetitions of receipt of a code signal of greater than 20 milliseconds in the remote control signal.

14. **(Original)** The video playback apparatus of claim 1 having one or more functionalities in addition to video playback, the functionalities selected from DSL, integrated receiver-decoder, WinTV, and personal computer.

15. **(Previously Presented)** A remote control device for use with a video playback apparatus of claim 1 having a replay-reverse multipurpose key and a skip-forward multipurpose key for generating the first signal and the second signal, respectively, when activated.

16. **(Previously Presented)** The remote control device of claim 15 having means to send the first signal when the replay-reverse multipurpose key is pressed and the second signal when the skip-forward multipurpose key is pressed.

17. **(Previously Presented)** The remote control device of claim 15 having means to send repetitions of the first signal when the replay-reverse multipurpose key is activated and to send repetitions of the second signal when the skip-forward multipurpose key is activated, each repetition separated by a predetermined gap.

18. **(Original)** The remote control device of claim 17 wherein the predetermined gap is between 1 and 10 milliseconds.

19. **(Original)** The remote control device of claim 17 wherein the predetermined gap is about 2 milliseconds.

20. (Previously Presented) A system comprising a video playback apparatus according to claim 1 and a remote control device having a replay-reverse multipurpose key for generating the first signal and a skip-forward multipurpose key for generating the second signal.

21. (Previously Presented) A method of controlling operation of a digital video playback apparatus, the method comprising the steps of:

invoking a skip function upon receipt of a second signal exhibiting less than a first predetermined duration, invoking a forward function exhibiting a first forward speed upon receipt of the second signal exhibiting greater than the first predetermined duration, invoking the forward function exhibiting a second, faster forward speed upon receipt of either the second signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the second signal; and

invoking a replay function upon receipt of a first signal exhibiting less than a first predetermined duration, invoking a reverse function exhibiting a first reverse speed upon receipt of the first signal exhibiting greater than the first predetermined duration, invoking the reverse function exhibiting a second, faster reverse speed upon receipt of either the first signal exhibiting greater than a second predetermined duration or upon receipt of a second occurrence of the first signal.

22-27. (Cancelled)

IX. EVIDENCE APPENDIX

No evidence has been submitted pursuant to §§ 1.130, 1.131, or 1.132 of this title. No other evidence has been entered by the Examiner and/or relied upon by Appellant in this appeal, at this time.

X. RELATED PROCEEDINGS APPENDIX

Appellant is not aware of any appeals or interferences related to the present application.